Application No.: 10/613,303

AMENDMENTS TO THE CLAIMS

Docket No.: 30538/38451

This claim listing will replace all prior versions, and listings, of the claims in the application.

1. (Currently amended) A process for the production of thioxanthone derivatives of the general formula (I) given below:

$$\begin{array}{c|c}
R1 \\
R4 \\
R6 \\
R5
\end{array}$$
(I)

where:

 R_1 , R_2 and R_2 R_3 is hydrogen, C_1 - C_{10} alkyl, C_1 - C_{10} alkoxy, halogen, hydroxy or C_1 - C_2 dialkylamino; R_1 , R_2 and R_3 being the same or different;

R₄ is oxygen, sulphur or absent;

R₅ is hydrogen, C₁-C₁₀ alkyl or aryl; and

R₆ is a straight or branched alkyl chain having 0 to 10 carbon atoms;

the one-step process comprising reacting a compound of the general formula (II) below with mercaptobenzoic acid or dithiobisbenzoic acid in the presence of sulphuric acid:

- 2. (Currently amended) A process as claimed in claim 1, wherein R_6 is $-(CH_2)_n$ in , n being 0 to 10.
- 3. (Original) A process as claimed in claim 1, wherein the compound of formula (II) is phenoxyacetic acid where R₁, R₂ R₃ and R₅ are each hydrogen, R₄ is oxygen and n is 1.
- 4. (Original) A process as claimed in claim 1, wherein R_6 is -CH(CH₃)-.

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5. (Original) A process as claimed in any one of claims 1 to 4, wherein the sulphuric acid is used in amounts 1 part to 20 parts by weight of acid to 1 part by weight of dithiobisbenzoic acid or mercaptobenzoic acid.

- 6. (Original) A process as claimed in claim 1, wherein the sulphuric acid has a concentration of equal to or greater than 90%.
- 7. (Original) A process as claimed in claim 1, wherein the molar ratios of dithiobisbenzoic acid or mercaptobenzoic acid to a compound of formula (II) are 1:1 to 1:5.
- 8. (Original) A process as claimed in claim 1 further comprising stirring the reactants to aid completion of the reaction.
- 9. (Original) A process as claimed in claim 1, wherein the temperature of the reaction is kept at 0 °C to 30 °C during addition of the reactants.
- 10. (Original) A process as claimed in claim 9, wherein the temperature is increased to 30 °C to 90 °C following addition of the reactants.
- 11. (Original) A process as claimed in claim 1 further comprising quenching the reactant mixture with excess water and filtering the solid product.
- 12. (Original) A process as claimed in claim 9, wherein water is added to dilute the acid strength to 20 50%.
- 13. 18. (Canceled).